

# Genetics Speech

Name \_\_\_\_\_

Sci \_\_\_\_\_

**Project:** You will create a PowerPoint Presentation and give a 2-minute talk about your topic to the class.

**PowerPoint presentation:** Use font 40 or larger. Do not include more than 5 words on a slide. Show pictures and explain! Don't read. Use additional slides to make additional points.

1. **Effects/symptoms:** What does this disease do to the body?
2. **Pictures:** Find a picture of the symptoms. Include pictures on each slide.
3. **Punnetts and Pedigrees:** Include Punnett squares and pedigrees. (If applicable.)
4. **Cause:** What causes your disorder? (Gene mutation? Non-disjunction?)
5. **Transmission:** Autosomal, Sex-linked? Is your condition dominant or recessive? Or, does the condition result from non-disjunction? (Note that non-disjunction is different.)
6. **Treatment:** What treatments are available?
7. **Testing:** Can a genetics counselor predict this condition?
8. **Fun Fact:** Share one or more interesting fact about this condition.

## Grading out of 20 points

- 1 point - **PowerPoint presentation**
- 2 points - **Effects/symptoms...**
- 2 points - **Pictures on every slide....**
- 4 points - **Punnett Squares and Pedigrees** (If applicable.)
- 1 point - **Cause:** (Gene mutation? Non-disjunction?)
- 1 point - **Transmission:** (Autosomal, Sex-linked, Dominant, Recessive?) Chromosomal = different
- 1 point - **Treatment** (If applicable.)
- 1 point - **Testing:** Can a genetics counselor predict this condition?
- 1 point - **Fun Fact:** Share one or more interesting fact about this condition.
- 6 points - **Presentation:** Talk to the audience. Refer to your pictures and explain. Don't read. Have good eye contact. Speak audibly. Don't say "Um". Don't gesticulate.

**Bonus Point for citing your sources!**

## Research Topics!

### Genetic Diseases/Conditions/Syndromes

1. Albinism
2. Achondroplasia (Dwarfism)
3. Baldness (Male- Pattern)
4. Bloom Syndrome
5. Blue People (Methemoglobinemia)
6. Color Blindness
7. Cry of the Cat (Cri-du-chat)
8. Cystic Fibrosis
9. Down Syndrome (Trisomy 21)
10. Hemophilia
11. Huntington's Disease (Huntington's Chorea)
12. Klinefelter's Syndrome
13. Lipodystrophy
14. Marfan Syndrome
15. Nail-Patella Syndrome
16. Niemann-Pick Disease

17. Progeria
18. Sickle Cell Anemia
19. Polydactyly
20. Syndactyly
21. Turner Syndrome
22. Tay-Sachs
23. Williams Syndrome
24. Rett Syndrome

### Potentially Disturbing:

25. *Edward Syndrome (Trisomy 18)*
26. *Lesch-Nyhan Syndrome*
27. *Jackson-Weiss Syndrome*
28. *Patau Syndrome (Trisomy 13)*
29. *Roberts Syndrome*
30. *Von Hippel-Lindau Syndrome*



# Genetics Speech

## Grading Rubric:

Name \_\_\_\_\_, Topic: \_\_\_\_\_

**PowerPoint presentation:** Use font 40 or larger. Do not include more than 5 words on a slide. Show pictures and explain! Don't read. Use additional slides to make additional points.

\_\_\_\_\_ 1 point - **PowerPoint presentation**

\_\_\_\_\_ 2 points - **Effects/symptoms...**

\_\_\_\_\_ 2 points – **Pictures on every slide....**

\_\_\_\_\_ 4 points - **Punnett Squares and Pedigrees** (If applicable.)

\_\_\_\_\_ 1 point - **Cause:** (Gene mutation? Non-disjunction?)

\_\_\_\_\_ 1 point - **Transmission:** (Autosomal, Sex-linked, Dominant, Recessive, Chromosomal?):

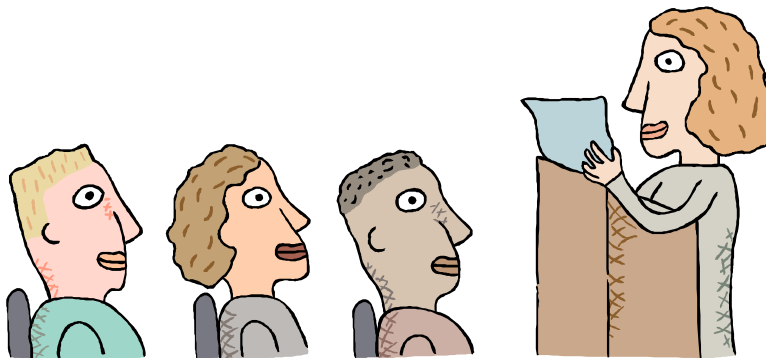
\_\_\_\_\_ 1 point - **Treatment** (If applicable.)

\_\_\_\_\_ 1 point – **Testing:** Can a genetics counselor predict this condition?

\_\_\_\_\_ 1 point – **Fun Fact:** Share one or more interesting fact about this condition.

\_\_\_\_\_ 6 points - **Presentation:** Talk to the audience. Refer to your pictures and explain. Don't read. Have good eye contact. Speak audibly. Don't say "Um". Don't gesticulate.

**Bonus Point for citing your sources!**



**Your speech will be due:** \_\_\_\_\_

You must finish your project on your own time. Find a computer at X-block, A+A and/or after school.